

Ajami:  
Spaces between the Street and the Privacy of Home

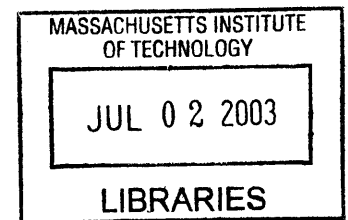
By

Noa Havalio

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF

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Signature of Author: .....

A handwritten signature, likely of the author Noa Havalio, consisting of a stylized 'N' and 'H'.

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February 26, 2003

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# Ajami: Spaces between the Street and the Privacy of Home

By  
Noa Havalio

Submitted to the Department of Architecture on February 26, 2003 in Partial Fulfillment of the Requirements of  
the Degree of Master of Architecture

## **ABSTRACT**

The thesis investigates, by research and design, spaces which are located between the street and the privacy of home, focusing on the case-study of Ajami; a mixed Palestinian-Israeli and Jewish-Israeli neighborhood in Jaffa, lying on the seashore of the Mediterranean. The houses in Ajami are separated from the street with a sequence of semi-inside spaces, steps and turns in which the privacy of the house is reached gradually as the in-between spaces unfold. While these spaces separate the house from the street they also open, at points, a space for communication between the private and the public. The houses in Ajami reflect a long process of additions, modifications and subdivisions of a once one-family villa surrounded by a courtyard-garden and a wall.

The qualities of spaces and movement within the existent buildings were used in the thesis to inspire a building type that was employed in the design of two houses, comprising of thirteen units overall. Behind the relatively simple envelopes of the buildings a variety of in-between spaces are interweaved in the design to form each unit its distinct story of arrival and inhabitation.

Thesis Supervisor: Bill Hubbard, Jr.  
Title: Adjunct Associate Professor of Architecture

I would like to thank:

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Among them I would especially like to thank here to my friends who helped me through this last project: Gretchen Fricke, Ozgur Basak Alkan and Nirmal, Liz Silver and Keon-Soo Nam

Thanks that could not be put to words to my beloved family:

My parents Ron and Jacqueline

My sisters Yael and Naomi

My grandparents Shlomo and Haya Havalio

And my grandmother, Silvia Nussbaum, whose support made my journey at MIT possible

Last but not least, I would like to thank Yaron, my husband, who has surrounded me with endless love and support, and who shared with me all the intellectual and emotional aspects of this journey.



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At the heart of this research stood the fascination with certain kinds of places that I have long wanted to try to define and reveal some of their secrets in order to incorporate them into future designs. These places, which will be called in this paper “in-between spaces”, are places that cannot be easily defined as either exterior or interior. While they are clearly part of the house they are also exteriors, lacking a roof covering, walls or both. The in-between spaces can be found between the street and the interior of the house, between houses, or within a house. In spite of their being ‘in-betweens’ or ‘transitional’ they create tangible places by themselves. It is only language that makes it difficult to find a positive definition for them instead of a definition based on their difference from ‘interiors’ and ‘exteriors’ or ‘private’ and ‘public’<sup>1</sup>.

Two specific examples of in-between spaces have shaped my fascination with spaces in the periphery of the house. The first is the intricate layered space in front of house Number 5 in Rama street in the neighborhood of Nakhlaot in Jerusalem (Fig. 1-2), and the second is a backside stairway space of a house in Bilu Street, Number 9, where my sister used to live, in the center of Tel-Aviv.

I encountered the first house in an architectural drawing class I was taking in the School of Architecture in Tel-Aviv University in the fall of 1998, with the instructor Salomon Moshe. We were asked to pick one façade in the Nakhlaot neighborhood to measure and draw in the course of one semester. This long work on one drawing was designated to teach an appreciation of the details, measurements and proportions which make a place habitable.

The in-between area preceding the house in Rama Street connects four dwelling units. Two identical gates open into this north-facing space. Behind the first gate, an exterior stairway climbs into the iron and glass hall of the second floor apartment; its transparency adds more layers of depth and allows glimpses into the interior.



**Figure 1**  
Facade of 5 Rama Street,  
Jerusalem, Watercolor on  
Paper, Original Scale 1:10cm,  
1998, Noa Havilio

Behind the second gate two steps descend into a pathway that penetrates the building and leads into three different units on the ground floor, expanding at its end into a tiny dark courtyard, entirely covered by the second floor apartment. A small bridge connects the stairway that leads up from the first gate to the rooftop of the ground floor apartment, hovering above the path below. With its beautiful details, the iron gates, the stone used for paving and the variety of flowerpots the façade of Rama 5 becomes a place of marvel for the eye. In the morning, when the space is best lit by the sun, the lightness of the bridge against the darkness of the path creates an extraordinary feeling of depth and mystery.

The space behind Bilu Street Number 9, the apartment building that my sister used to live in, was not particularly beautiful, it was located in an untended and undefined piece of land bordered by the backs of other apartment buildings. The handsome Bauhaus building at Bilu 9 formed at its back side a u-shape and the old stairway was located in the space created within. The stairs connected to narrow porches that led to the kitchens of the different units. The apartments were mainly rented by students who lived with roommates or partners. Since everybody used the kitchens and the kitchen porches were a nice place to sit and enjoy the western breeze coming from the sea, this back space was filled with life. My sister quickly learned to know most of the residents of the building, and they often sat there, listening to music together, drinking or cooking on the grill.

Both of these in-between spaces would not be so successful without the specific people inhabiting them, maintaining the flowerpots or binding relationships with the neighbors. The people are the ones who enliven those places, but the architecture created the potential for the creation of such places.



**Figure 2** Plan and Facade of 5 Rama Street, Jerusalem, Watercolor on Paper, Original Scale 1:10cm, 1998, Noa Havilio

<sup>1</sup> Gordon Cullen uses the terms “enclaves” and “enclosures” for places in the public realm that creates “interiors” even though they lack walls or roofs. These terms partially overlap the term “in-between” spaces but do not convey the exact meaning I was looking for. Gordon Cullen. *The Concise Townscape*, New York, Cincinnati, Toronto, London, Melbourne, Van Nostrand Reinhold Company, 1961, p. 25.

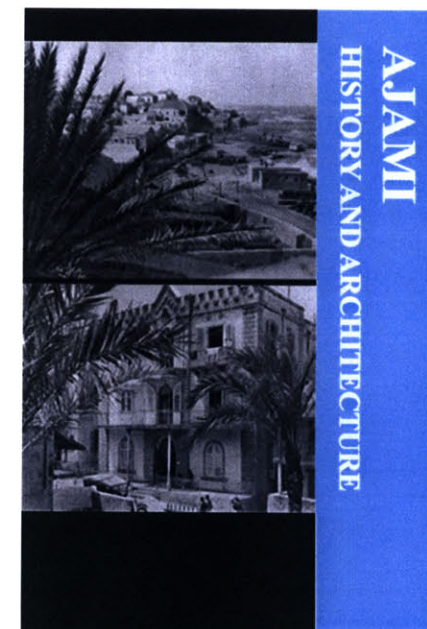


The Ajami neighborhood started to be built outside the walls of Old Jaffa, to its south, in the second half of the 19<sup>th</sup> century, during the rule of the Ottoman Empire. The neighborhood is named after one of the prophet Muhammad's companions, Ibrahim al-Ajami, who is believed to have been buried in the neighborhood, next to al-Ajami mosque<sup>2</sup>. The neighborhood began as a small Maronite settlement, a neighborhood with ample houses, streets parallel to the sea, small stairway-alleys leading down to the shore, and a church in the center<sup>3</sup>.

During this period, the development of a new bourgeoisie and the importation of new construction techniques and materials from Europe, such as shingle slanted roofs and glass plates accelerated the expansion of cities in today's Israel. New types of houses developed, such as the "Courtyard House", the "Iwan House" and the "Riwaq House" (Fig.5)<sup>4</sup>. The most common type, which was widely used in Ajami, was the "Central Space House", also known as the "Classical House" or the "Lebanese House"<sup>5</sup>. These houses were built inside the old fabrics of cities and in brand new neighborhoods such as Ajami.

In the beginning of the 20<sup>th</sup> century hundreds of families, mainly Palestinian-Christians, from different financial backgrounds had settled in Ajami. The neighborhood expanded as a narrow strip between the seashore to the west and orchards to the east, until it merged with Jabaliyya neighborhood to the south<sup>6</sup>.

In the period between the two World Wars new construction techniques from Europe, most notably reinforced concrete, and aesthetic values have infiltrated to the region, largely resulting the wave of Jewish-European immigration. In the nearby city of Tel-Aviv the Bauhaus and the International Style became prominent. The famous Shlush factory supplied an abundance of industrial 'traditional ornaments', such as balustrades, corbels and window decorations which were used in



**Figure 3** Ajami in the Beginning of the 20<sup>th</sup>

“oriental”-modern buildings named the “Eclectic Houses”. In Ajami, The merging of modern techniques, industrial ornaments, local building traditions and local aesthetic values created a unique architecture of lofty houses, with wide arcaded porches and intricate decoration<sup>7</sup>.

During the war of 1948 the majority of Jaffa’s population fled the country and was not able to return. The nearly deserted neighborhood was soon settled with Jewish immigrants from East Europe, the Balkans and North Africa. A large Israeli-Palestinian population from different parts of the country moved to the neighborhood as well. Ajami changed into a crowded and lively immigrant city. To accommodate the influx, its palaces-like houses were subdivided among many families. Gradually, the neighborhood became inflicted with poverty and crime.

The municipalities of Jaffa and Tel-Aviv merged in 1950. As time passed, new plans developed to transform Ajami into a modern neighborhood, in the spirit of Tel Aviv. This decision was immediately followed by a widespread demolition of houses and evacuation of Ajami’s inhabitants. The neighborhood’s condition drastically and quickly deteriorated, while modern infrastructure was not built. This demolition included large parts of Old Jaffa as well, making place for a huge park at its center and only narrow strips survived from the dense old fabric<sup>8</sup>. In addition to the demolition and evacuation of Ajami’s residents, the neighborhood was badly harmed by the casting of construction waste into its once beautiful shores. The piles of waste accumulated to the height of 20m, blocking the beautiful neighborhood from the sea<sup>9</sup>.

During the 1980’s gentrification started to filter into Ajami and especially to Old Jaffa. At the same time, the architectural and historical value of Ajami neighborhood was finally recognized by the municipality of Tel-Aviv-Jaffa. It stopped the demolition and developed a conservation plan, trying to save the little that has remained. Several new projects, some of them built with lack of

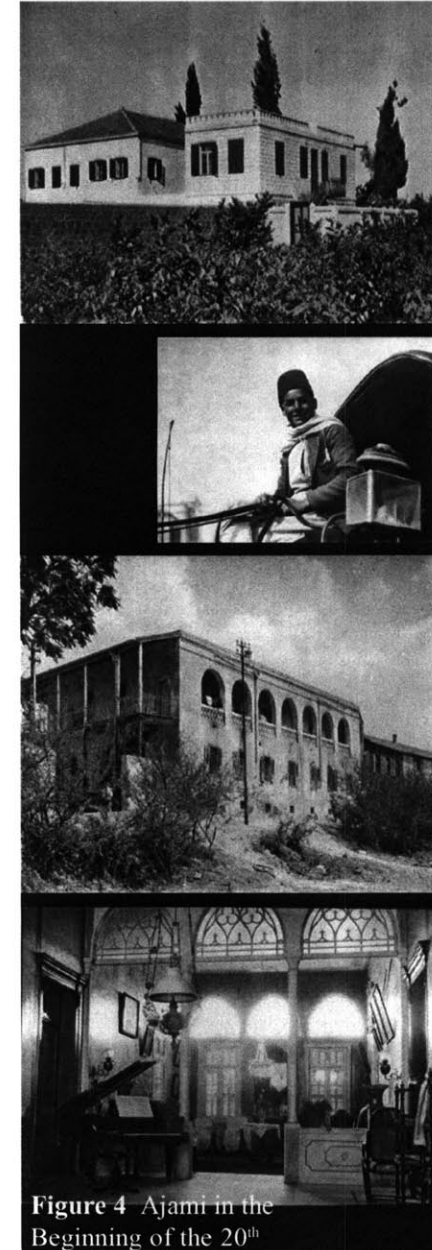
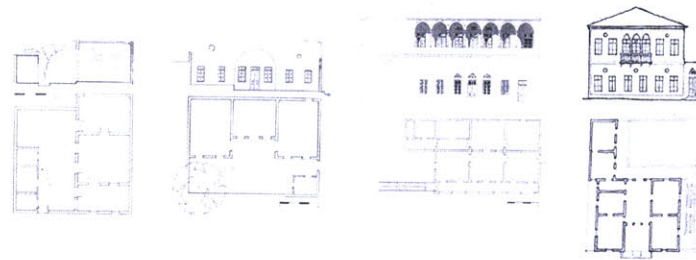


Figure 4 Ajami in the  
Beginning of the 20<sup>th</sup>

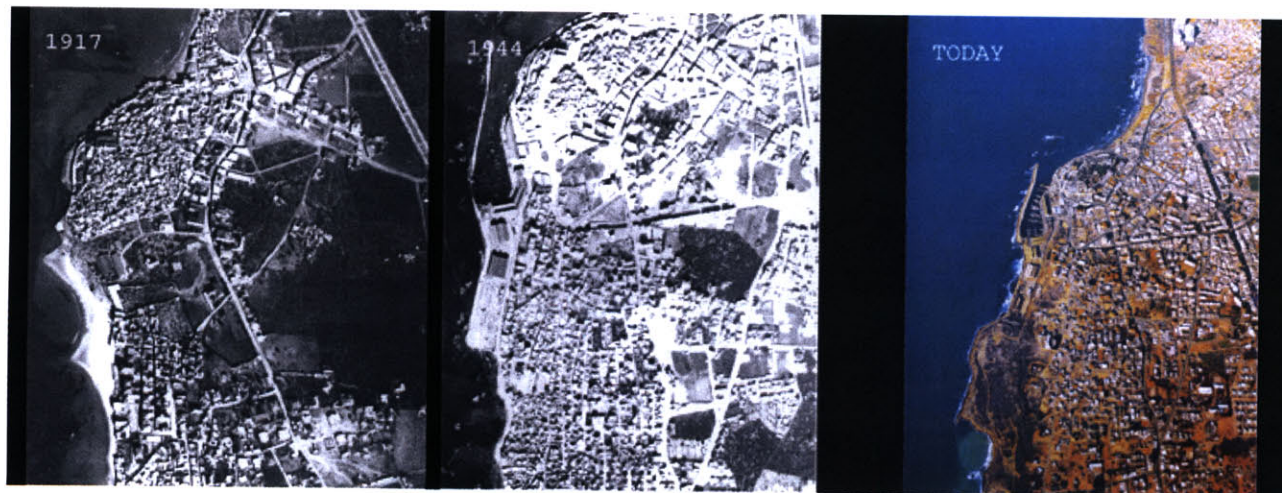


sensitivity to the surrounding social and/or urban landscape, were built in Ajami, and some buildings were nicely renovated. The process of gentrification almost froze after the break of the second *intifada* in October 2000.

Today, the opulent past of Ajami is still visible in its alluring palace-like houses, colorful plastered walls, ample spaces and details of decoration. At the same time the wounds of its history are still present in the abundance of empty lots, in the mound of waste obstructing the access to the sea, in the frustrations and memories of many of its present-day inhabitants and in memories of families of Palestinian refugees who fled from Jaffa in the war of 1948.

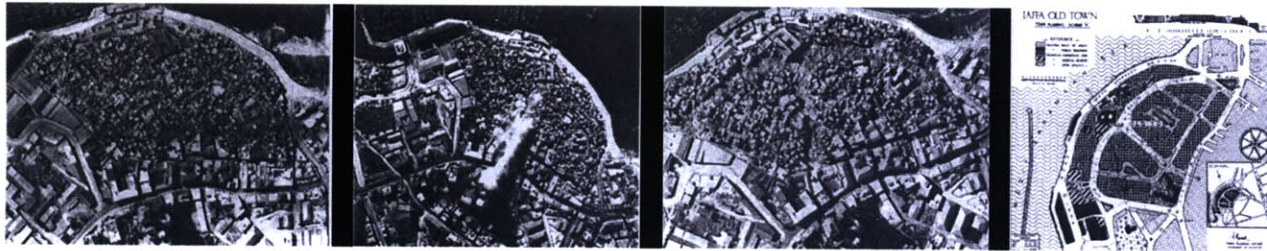


**Figure 5** The Courtyard House, the Iwan House, the Riwaq House and the Central Space House.



**Figure 6**  
Comparison of Aerial views of Ajami from the years 1917, 1944 and today





<sup>2</sup> Ofer Regev. *Tiyul Katan be-Ir Gdola: Letayel be-Tel-Aviv-Yafo (A small Journey in a Big City: Touring in Tel-Aviv Jaffa)*, Tel-Aviv, Misrad ha-Bitahon – haHotsa'a la-Or; ha-Mo'atsah le-Shimur Mivnim ve-Atare Hityashvut; Hakhevera le-Haganat ha-Teva, 1999, p. 63.

<sup>3</sup> Doron Zafir, Sergio Lerman et al. *Yafo: Mabat al Ajami, Dyokan Adrikhali (Jaffa: A Glance at Ajami; an Architectural Profile)*, Tel-Aviv, Municipality of Tel-Aviv-Jaffa, 1992, p. 4.

<sup>4</sup> Ron Fux. "The Arab House in Ottoman Haifa- an Architectural Documentation", *Haifa: Historia Mekomit (Haifa: Local History)*, ed. Ben Arzi, Yosi. Haifa, Haifa University and Zmora Bitan, 1998, p. 63-64.

<sup>5</sup> Fux names this type of building the "Central Space House" (Fux, 71-82) while Zafir et al. name it the "Classical House" (Zafir, 17). I have encountered this type of building in a preservation studio I have taken in Tel-Aviv University in 1999 with Amnon Bar-Or and Sergio Lerman where it was named the "Lebanese House" or even "Venetian House". It is mentioned in Fux's article that this type of house, which he names "Central Space House" was imported from Lebanon and might have been partially influenced from European design of villas. Fux, 72.

<sup>6</sup> Doron Zafir, Sergio Lerman et al. *Yafo: Mabat al Ajami, Dyokan Adrikhali (Jaffa: A Glance at Ajami; an Architectural Profile)*, Tel-Aviv, Municipality of Tel-Aviv-Jaffa, 1992, p. 4.

<sup>7</sup> Doron Zafir, Sergio Lerman et al. *Yafo: Mabat al Ajami, Dyokan Adrikhali (Jaffa: A Glance at Ajami; an Architectural Profile)*, Tel-Aviv, Municipality of Tel-Aviv-Jaffa, 1992, p. 4.

<sup>8</sup> The destruction of Old Jaffa already started with the "Anchor Operation" by the British Mandate Army in June 1936 that came as a retaliation following the "Arab Rebellion". The Army blew up more than two hundred houses to make way for two wide routes in the shape of an Anchor. Yanon, Ya'acov. *Sviv Kikar ha-Shaon (Around the Clock-Plaza)*. Jerusalem, Yad Izhak Ben-Zvi, 2001, p. 82-83. See Fig. 7

<sup>9</sup> The condition of the sea shore is described in: Tsur Shezaf. *Sefer Yam (Sea Book)*. Tel Aviv, Orly Pecker, Yedioth Ahronoth and Chemed books, 1991, p.139.



**Figure 7** Comparison of Aerial views of Ajami from the years 1917, 1944 and today

**Figure 8** Ajami houses dipping in the Mediterranean sea in the beginning of the 20<sup>th</sup> century.



**Figure 9** Construction Waste Blocking the Sea and Demolished and Neglected Houses



As described in the Introduction, I was treasuring the idea of the in-between spaces as spaces that share the beauty and life of the house and the street and that create opportunities for social encounter between the neighbors and with passer-bys. I didn't know Ajami very well before this summer, and all I remembered was the prevalence of beautiful colorfully-plastered houses, and the strong presence of the sea and sunlight. I held the romantic idea or maybe a secret wish that I will find a neighborhood inlaid with an abundance of in-between spaces by which the notion of identity and sense of community are strengthened. This wish was only partially fulfilled, yet the incongruity of the image in my head with reality was an interesting lesson by itself.

Talking to people in Ajami I heard stories that have supported my intuition about the social potential of in-between places, but I also heard about the importance of privacy and the will for enclosure. In addition, I have noticed that some of the in-between spaces that were most alluring and most used were not created by the architecture of the buildings but by practices of the people themselves, such as the placement of plastic or wooden chairs in the periphery of the streets. The in-between spaces were not as present in the street as in Nakhlaot for example, partly because so many houses have been demolished, but partially because there is a tendency in the architecture of Ajami to enclose the courtyards with very high walls, often reaching more than 3m or 4m. The layers of additions are often only apparent within the courtyards rather than wrapping the houses and visible from the street. For that reason, the in-between spaces often have in Ajami a more subtle presence in the street than that of Nakhlaot, but this subtle language of glimpses and not of full exposure, while disappointing to me only at first, soon disclosed its charm and sensuality.

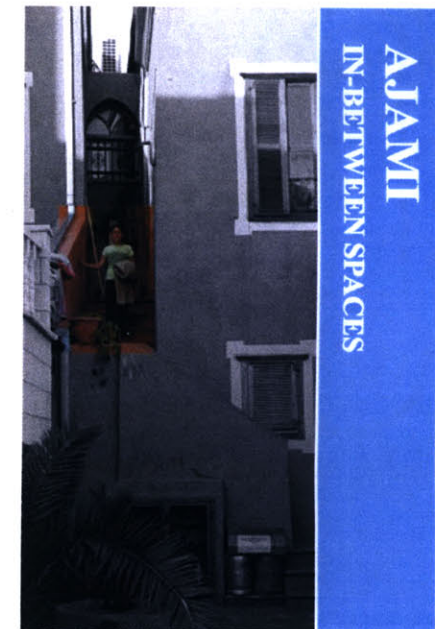


Figure 10



This chapter will offer a catalogue of in-between spaces in Ajami. It will only refer to those spaces that are visible from the street. Some of these spaces were only revealed to the lens of my camera by chance when a usually-closed door was left open. In the next chapter the spaces which will be analyzed are those into which I was allowed access and could document not only from the outside but also from the inside.

The in-between spaces in Ajami are usually comprised from a combination of several of the elements displayed in the catalogue. The different variations result in unique sequences and different degrees of depth. additions of walls to divide and enclose parts of these spaces impart further complexity of movement and sight.



The Following Images were Taken by the Author in Ajami, Summer 02.

THE CATALOGUE:

Semi-Private Paths



## Steps

Steps preceding the house



Semi-exterior stairway



Stepped street



Bridges





## Walls and Fences

Low Walls



High Walls



Perforated Walls



Courtyards



Gardens



Consecutive Courtyards



Covered Courtyards





## Porches

Extending Ground Floor Porches



Excavated Ground Floor Porches



Extending Upper Floor Porches



Excavate Upper Floor Porches



Roof Porches



Passage underneath a Building



Free-Standing Gates



## Covering

Awnings, overhangs, vine lattices, cloth coverings



## Private Use of Streets and Sidewalks

Chairs and tables, Laundry, Flowerpots



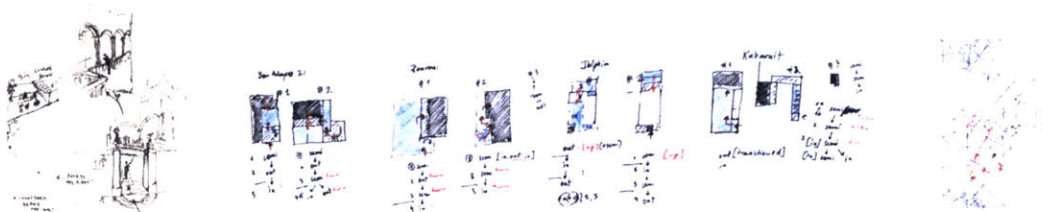
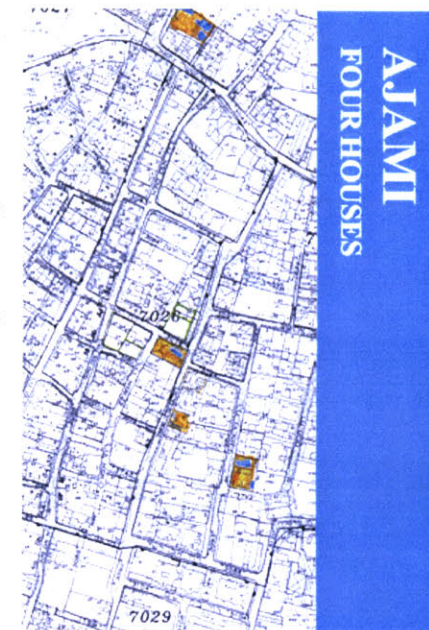


**Figure 12** Map Showing  
Location of the Four  
Houses

Four houses in Ajami will be examined in this section, focusing on the sequence of in-between spaces leading from the street to the privacy of the house. The houses are relatively close to each other. Three are located in the center of Ajami within less than two minutes walk from one another, next to the sites I have chosen for the design. The fourth house is located within a few minutes walk to the north, at the Maronite neighborhood, which was the first settlement in Ajami.

The houses chosen were four of the houses I found to be most beautiful and evocative in their relation to the street. Their selection was made so as to be able to analyze spaces that are as varied as possible. Moreover, purely by coincidence, the residents of these houses belong to a variety of ethnicities, religious beliefs and different generations in Ajami.

The plans that are presented in this section were drawn on the basis of measurements taken on site juxtaposed with usually outdated plans found in the archive of the Municipality of Tel-Aviv- Jaffa.



**Figure 13** Sketches  
Figuring the Sequences of  
In-between Spaces



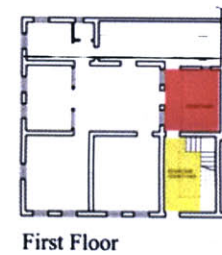
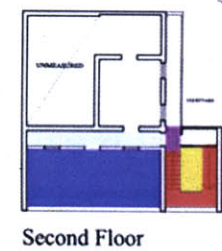
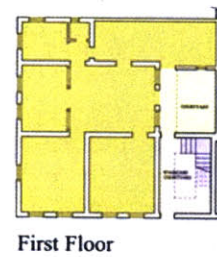
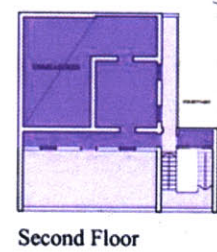
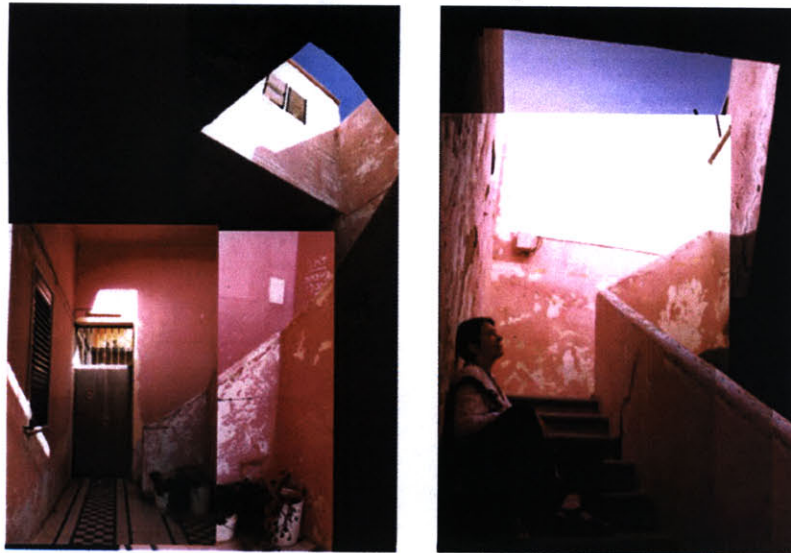
**Figure 14** In-between Spaces in:  
 21 Ben-Adaya, 13 Reuveni,  
 19 Dolphin, 20 Kabarnit



**Figure 15** 21 Ben-Adaya Street –  
General view from Northwest



**Figure 16**  
21 Ben-Adaya – Photomontages of Staircase Space



**Figure 17** 21 Ben-Adaya –  
To the Left: Diagram Showing Division to Units.  
To the Right: Diagram Showing Sequence of In-between Spaces. Scale 1:500cm

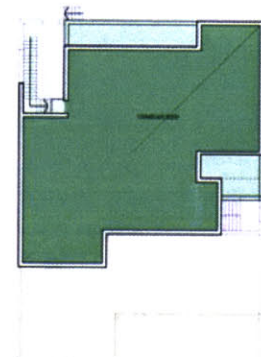


**Figure 18** 13 Reuveni Street –  
General View from Northwest

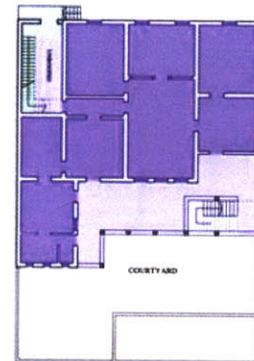
**Figure 19** 13 Reuveni -  
Images of Staircase space



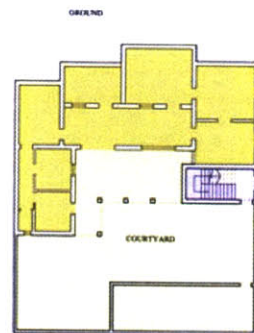
**Figure 20** 13 Reuveni -  
To the Left: Diagram Showing Division to Units.  
To the Right: Diagram Showing Sequence of In-  
between Spaces. Scale 1:500cm



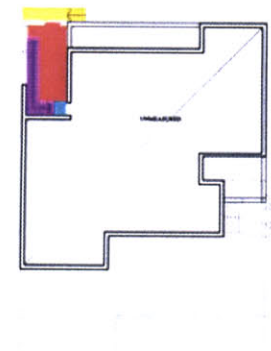
Third Floor



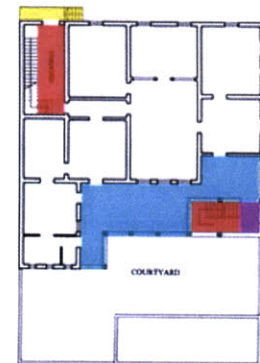
Second Floor



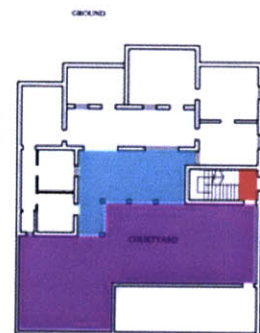
First Floor



Third Floor



Second Floor



First Floor



**Figure 17** 19 Dolphin Street –  
General View from Southwest.



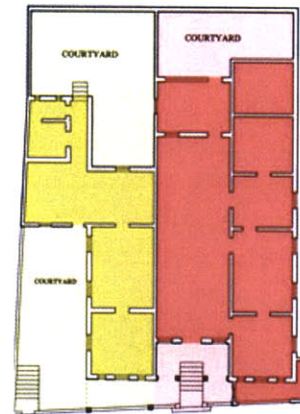
**Figure 18** 19 Dolphin –  
Images of the Two Apartments



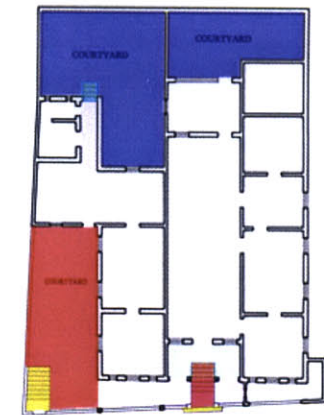
Issy & Pola



Abu-Kasis



First Floor



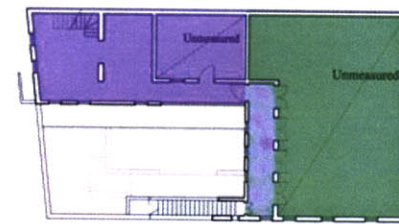
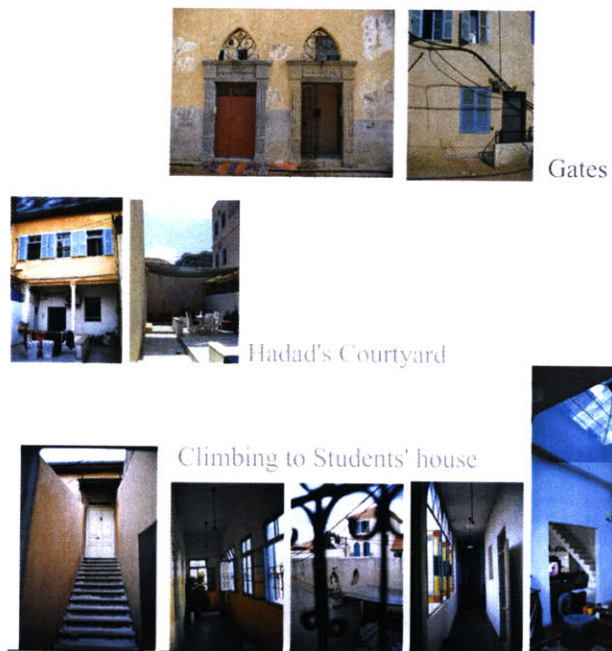
First Floor

**Figure 19** 19 Dolphin –  
To the Left: Diagram Showing Division to Units.  
To the Right: Diagram Showing Sequence of In-between Spaces.  
Scale 1:500cm

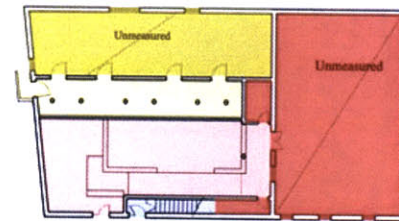


**Figure 20** 20 Kabarnit Street-  
General View from the Northeast

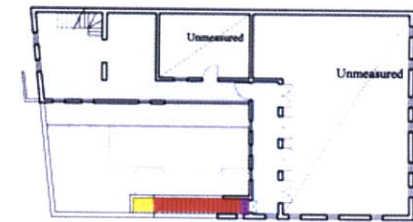
**Figure 21** 20 Kabarnit - Images of Three Gates and Two Apartments



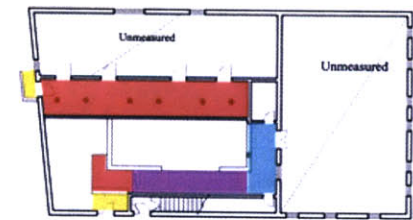
Second Floor



First Floor



Second Floor



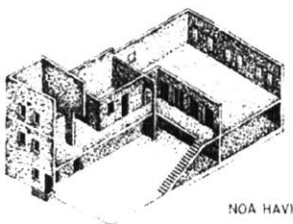
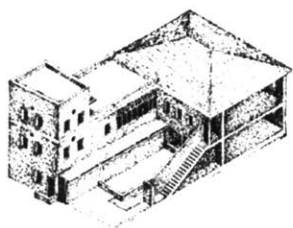
First Floor

**Figure 23** 20 Kabarnit-  
To the Left: Diagram Showing Division to Units.  
To the Right: Diagram Showing Sequence of In-between Spaces.  
Scale 1:500cm



# KABARNIT 20

LAYERS. AJAMI, SUMMER 02



NOA HAVILIO

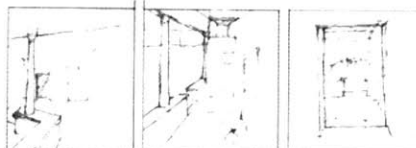
## KABARNIT 20 SEQUENCES.



SECOND FLOOR



FIRST FLOOR



NOA HAVILIO



## Oldness History and place

The houses, usually built with resistant materials and beautiful details, were built in the end of the 19<sup>th</sup> century and during the first half of the 20<sup>th</sup> century. The ample rooms and courtyards were left deserted after their inhabitants fled Jaffa as a result of the 1948 war. The buildings were soon readjusted to the extreme socio-economic change that Ajami experienced after the establishment of the state of Israel. The spacious “palace-houses” were subdivided between many families and additions were made. In Ajami, the additions and changes were usually made inside the high walls while the facades to the streets maintained much of their former integrity. In addition to the pristine facades, the neighborhood is still arranged in most parts on a grid of streets and thus suits the needs of modern infrastructures more easily than other old neighborhoods in Israel<sup>12</sup>.

An important aspect of the appeal of the houses is their oldness itself: the livelihood created by their formation during a long period of time, the signs of obsolescence and the memories they provoke. However, there are many successful examples (such as the works of Tadao Ando and Luis Barragan) for buildings that have managed to traditional and contemporary features and principles and to create new architecture that is not less successful or evocative in its aesthetic, use of space, and sense of identity and place.

The building type proposed here naturally concerns with the design of new buildings. It stems from a subjective interpretation of Ajami and its qualities. It is based on four case studies that seemed to be typical yet extraordinary and on a personal fascination with the quality of in-between spaces. It also suggests that the new buildings can convey the memory of the history of Ajami by keeping the configuration of a multi-family house that is trapped within a ‘palace’ or a villa.

The building type suggest to preserve the social-spatial qualities of the houses rather than their stylistic features. Since I believe that the preservation of the idea of the sequence of spaces between the street and the individual dwelling unit and the depth of sight that the house reveals to the street might be more important for the preservation of the character

of the neighborhood then the shape and sizes of windows that are currently considered by the municipality of Tel-Aviv Jaffa an essential feature to preserve and reproduce in new designs<sup>13</sup>.

The type developed in this research was developed to fit the *genius Loci* of Ajami and to serve as guidelines for buildings that could start filling-in the scorched neighborhood and contribute to its healing. But it can be used in other contexts: either the type itself or the process of creating the type. While it was developed as a personal tool for learning and design, it is also a proposition for designing in Ajami that can guide other architects working in the neighborhood. Many successful neighborhoods are comprised from a limited assortment of dwelling types, the similarity in the variety is very powerful in creating a sense of place in the city. In that respect, I think that the decision of the municipality to preserve the urban fabric and to apply regulations on new designs is important.

### **Density**

Since many of Ajami's inhabitants were evacuated during the 70's and many houses were demolished, the density of the neighborhood is no longer very high. On the other hand, there is a growing need for more dwelling units, especially by the younger generation of the current residents.

The challenge is to design buildings that will maintain the special relation between street and house between interior and exterior but with a greater number of dwelling units per plot, so that they can be affordable. The challenge is to provide this density without harming the section of the street that gives a pleasant character to the neighborhood.

While this model proposes to keep the volume of the houses close to what it is today, as well as the relations between the plots, and the proportions between exterior and interior - it will be the reducing of measures within the division of the unit, rather than drastic change of proportions that will manage to provide the required density. This architectural challenge can provide the necessary programmatic complexity that would force the architect to find interesting solutions and intricate spaces<sup>14</sup>.

### **Street section and relations between the buildings**

In order to maintain the pleasant proportions of the streets and the memory of the 'palace-houses' the volume of the buildings should not be drastically increased. Their height should not go higher than the height of 3 stories in a traditional house (about 13m), but can be translated to 4 stories in contemporary construction. The size of the plots should not exceed 450m<sup>2</sup>, and can easily be half this size<sup>15</sup>. The plots in Ajami are usually open from three and often four sides. By inserting small paths between plots and by keeping large enough courtyards this principle can be maintained in new designs in the neighborhood. This characteristic can assure the abundance of air and sunlight entering the apartments.

### **Proportions of exterior and interior**

All the houses that have been examined consist of a generous area of exterior and in-between spaces. In the house in the Dolphin street 43% of the floor area is exterior (or in-between). In Reuveni and Ben-Adaya it is 33% and in the Kabarnit it is only 23%. If one considers the flat roof areas as well, the percentage of exterior area to floor area increases: 63% of outside space in the Dolphin 46% in Reuveni and Ben-Adaya and 33% in Kabarnit.

In the case of the Kabarnit house, most of the exterior is only used by one family, but if each unit had a small exterior space and the courtyard was a bit smaller, but especially if the roof was also used as an exterior space, the proportions of exterior and interior of 33% could be sufficient to maintain their qualities for each of the units.

### **Measurements**

As mentioned above, the heights of each floor can be reduced in order to attain a larger floor area, while not harming the section of the street: today the ceilings are usually 4m, in some cases even 6m, maintaining a minimum height of 2.8m (and occasionally 2.5) can also suffice.

The size of the units range from 2 to 6 bedrooms, each bedroom is usually no smaller than 13m<sup>2</sup>, the average is closer to 17m<sup>2</sup> and the living rooms can reach 60m<sup>2</sup> (like the one of Izzy and Pola). If the sizes of rooms decreases to a

a minimum of 7.5m<sup>2</sup> and if the apartments would be offered in a variety of sizes, as well as studio apartments, the number of units per plot area can be increased dramatically.

### **Principles in the design of in-between spaces:**

There are several principles that can be retrieved from the case studies we have examined in the previous chapter:

1. An important principle is that the door or gate from the street will never lead to more than two dwelling units. Often, each unit has its own gate to the street, even if it is located in the second floor, and its own sequence of in-between spaces. As a result, each building has several different entrances.
2. Each unit is preceded by at least two in-between spaces (for example, a semi-open staircase leading to a courtyard, an enclosed landing behind the gate leading to exterior stairs behind another gate).
3. Each unit is usually preceded by at least two gates/doors before one enters the interior of the apartment.
4. The in-between spaces (loggia, porch, semi-open staircase) are sometimes divided by steps, low or high walls, turn, an awning or even a cloth to further spaces of in-betweens.
5. The entrance doors to the house or the entrance gates to the courtyards are always preceded by an element that creates a space in front of it- usually one step or a set of steps and sometimes an enclosure made by a low fence.
6. The transition from in-between space to another is with almost no exception accompanied by a change of level or turning.
7. When one enters into a courtyard or a porch that precedes the house, the door to the house will almost never be directly in front, when it is, this situation will usually be compensated by a drastic change of topography from the street to the courtyard in order to keep the notion of privacy.
8. This relation of turning and changing of level and of the series of gates and elements that obstruct the view creates a sequence in which the different views of the street and house unfolds as the journey advance, and includes elements of

surprise and revelation for someone who is first visiting. The in-between spaces make the transition by controlling the views, the movement and by muffling the sounds.

9. In the case of the Kabarnit and Reuveni houses there is a big courtyard in the ground floor that is overlooked by the second floor. This courtyard is fully revealed to someone climbing to the second floor only when one reaches the second floor: The stairways are not going in or through the courtyard without being screened from it. Moreover, the second floor apartment overlooks the courtyard through a transition space (corridor or loggia) in order to keep the privacy of the two units but at the same time still open a potential for communication.
10. The rooms that are entered from the in-between spaces are always either the living room, or the kitchen and dining room. I do think, however, that a bedroom porch can also be very nice, as long as it cannot be accessed from the street.
11. When possible to make more than one in-between space in different faces of the house, the residents can use different spaces in different times of the day and year.

### **Keeping the notion of the ‘villa’**

All the houses that we have examined began as a big villa with at least one big courtyard surrounded by a high wall. With time, additions and subdivisions changed the house, but the notion of the big villa have been maintained, since the additions were not high or large enough to overshadow the presence of the villa. This principle can be maintained by laying a big enough volume as the primary section of the house that is spread on nearly half of the plot area. And then, while maintaining a courtyard space, the ‘additions’ can be made to be either not as high or not as wide. In the design I decided to keep the shape of the rectangle or square for the larger volume and to use orthogonal language in general.

## **The introvert and extrovert house**

The degree of exposure to the street can vary. While houses like Dolphin 19 display many layers of spaces to the street, Kabarnit 20 belongs to the type of the enchanted garden that is wrapped by a high wall and allow only selective glimpses of its interiors, the layers of in-between spaces are behind its wall. In the design these two types would be employed.

### **Style and concept**

The style of the architecture, the details used, even the types of in-between spaces can change from design to design, as long as the principles of inhabitation are kept. These rules are not enough to make a good and beautiful design, and probably no set of rules can promise that unless it is very strict and detailed. Hopefully they can serve as guidelines that will improve the making houses that are humane and maintain some of the important qualities of the neighborhood, while allowing a variety of places and interpretations.

<sup>12</sup> It could be interesting to compare the development of Ajami to Nakhlaot. Each neighborhood has acquired its charm in the course of history, but while additions in Ajami are often introverted, in Nakhlaot they are extroverted, different layers and styles are displayed to the street. In Ajami the complexity has a more subtle presence in the streets while in Nakhlaot its playfulness is revealed to every passer-by.

<sup>23</sup> A similar approach for preservation to that of the municipality of Tel-Aviv-Jaffa can be found in the case of Jerusalem where regulations by the municipality oblige the use of stone in the exterior of the houses.

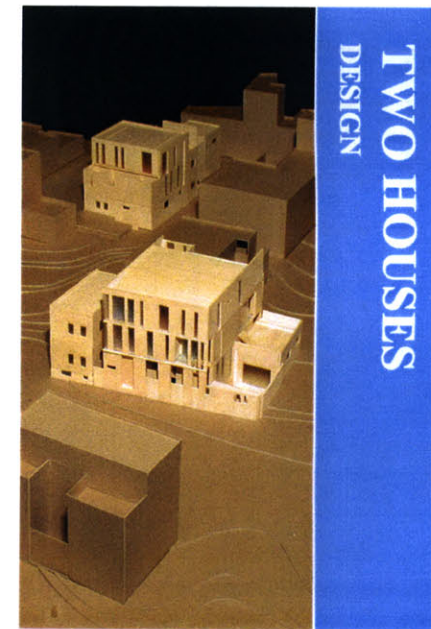
<sup>34</sup> In the case of Tadao Ando it is the complexity of the site with the determination to provide exterior and in-between spaces, that results in original solutions.



Two sites were chosen for the design of two houses. The first house, located on the corner of Ben Adaya Street and the Kabarnit Street on an area of 21m by 10m and is comprised of 5 units. The second house is surrounded by street from three sides; the Kabarnit Street, Ibn Sina Street and Rav haKhovel Street. The building spreads on an area of approximately 21.5m by 14m. Both sites are roughly rectangular and surrounded by alleys or streets from three sides. They both get a view of the sea in some of the apartments.

The buildings were designed according to the building type to convey the notion of the divided 'palace-house' or villa. Behind the relatively simple and pristine façade, in-between spaces were interweaved, according to the suggested model to provide each unit its unique story of the arrival to the privacy of home and habitation of in-between space.

The building is not necessarily intended for a specific population and is suggesting a variety of sizes and characters of apartments, but I did have in mind the need to design houses that a large percentage of their apartments would be affordable and for larger families, since one of the most pressing problems in Ajami is the lack of housing for the sons and daughters of the current inhabitants. For that reason I have chosen the most common and cheap construction method in Israel of orthogonal-plastered-reinforced concrete. In addition the buildings are designed to be considerably denser than the ones I have researched. My belief is that in spite of these concessions each unit can still benefit from a high degree of spatial quality.



## SITE OF THE INTROVERT HOUSE



The two buildings were designed to experiment two opposite configurations of the house in relation to the courtyards and streets. In the “introvert house” the building is surrounding a big courtyard. In the “extrovert house” the building is surrounded by smaller courtyards paths and roof porches.

The main drive for the design of the sequences of movement in the first building was the variety of different stories by which the main courtyard is revealed. In the second building, the surrounding of the building with in-between spaces was completed with back and front arcades that are excavated into the main volume. The front arcade in the ground floor is shared by three apartment and continues as a private and free standing arcade to the south. A bench facing the street allows a glimpse into the deep perspective of the arcade with intense plays of light and shadow.

## SITE OF THE EXTROVERT HOUSE



## VIEW FROM THE SITE OF THE EXTROVERT HOUSE





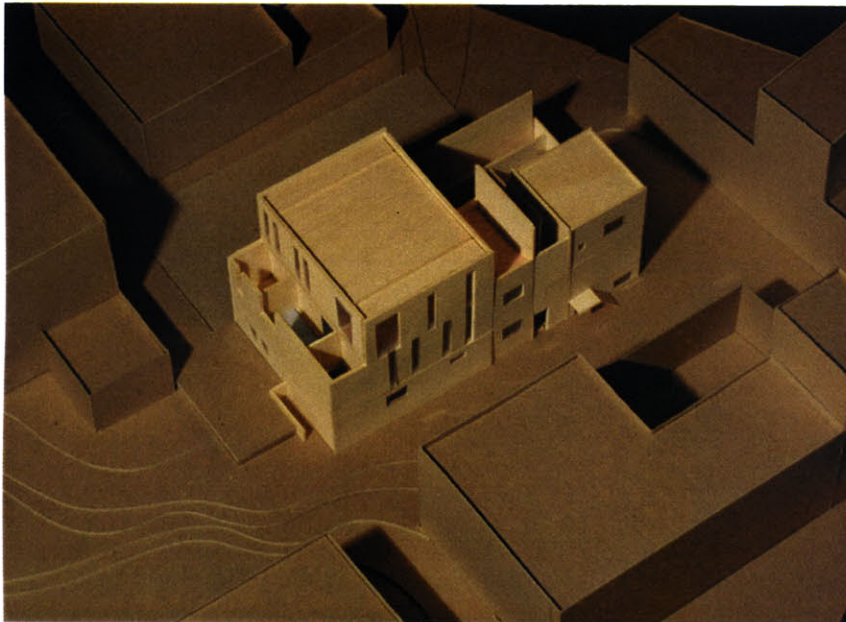
**Division into units in the two buildings:**

- 1 Studio apartment
- 2 apartments of 2 rooms (1 Bedroom in American terms)
- 6 apartments of 3 rooms (2 Bedrooms in American terms)
- 4 apartments of 4 rooms (3 Bedrooms in American terms)

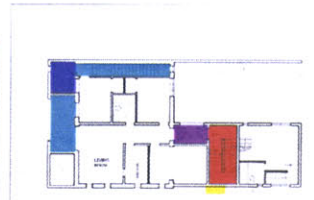
overall 13 units



# THE INTROVERT HOUSE DESIGN



FLOOR 1



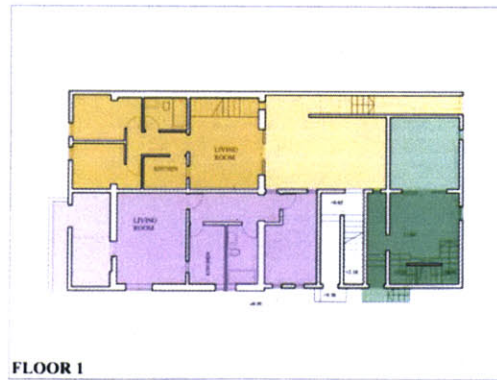
FLOOR 2



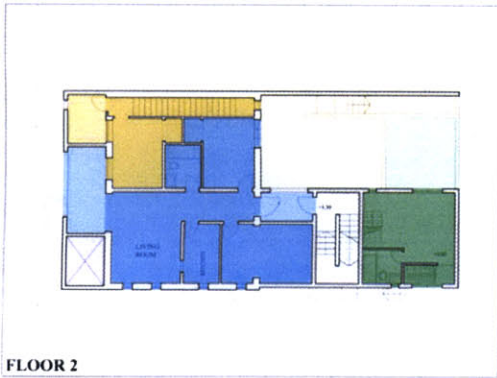
FLOOR 3

Diagram showing the sequence of spaces from the street to the privacy of home to each unit (using a scale ranging from yellow to blue).

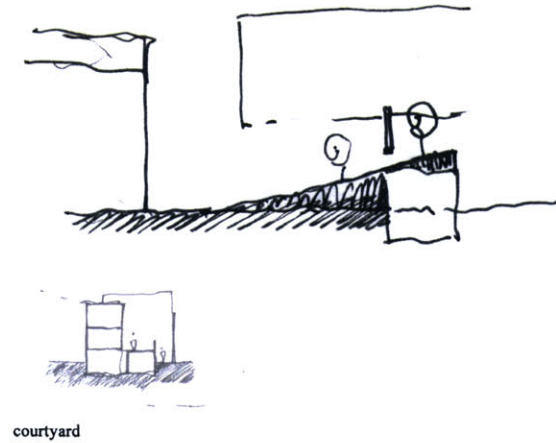
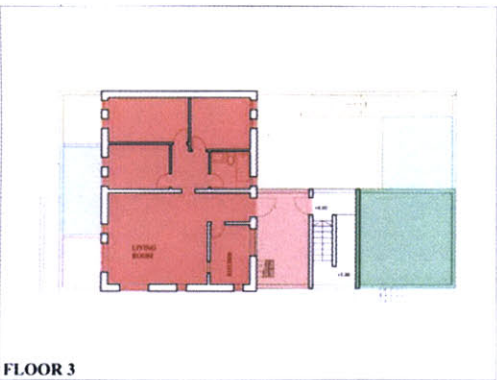




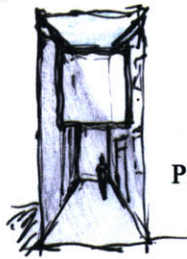
FLOOR 1



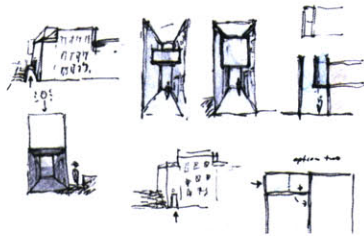
FLOOR 2



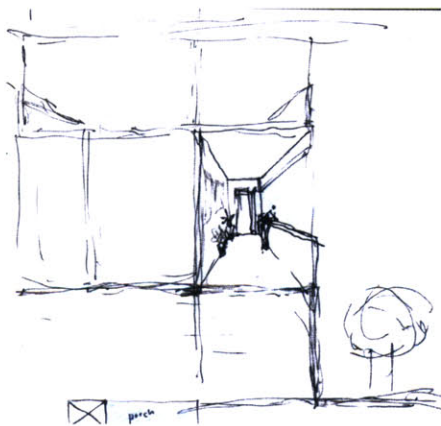
The concept that initiated the design of the introvert-house courtyard was the memory of the wide orchards that used to surround the ‘villas’ as opposed to the current dense an urban condition. By creating a topography within the courtyard and by dividing it with a wall that let the space flow underneath it, the notion spaciousness expands. The entrance to the main courtyard is through a very long and narrow path enclosed from two sides and open to the sky, after this long compression the magnitude of the open space increases.



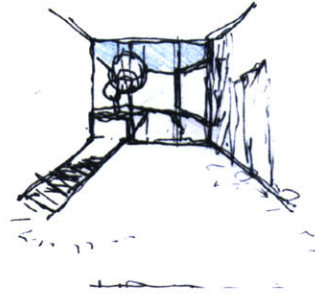
Process Drawing



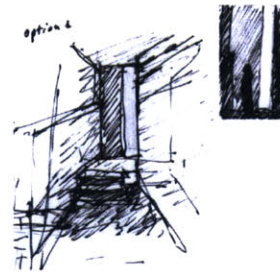
Purple apartment



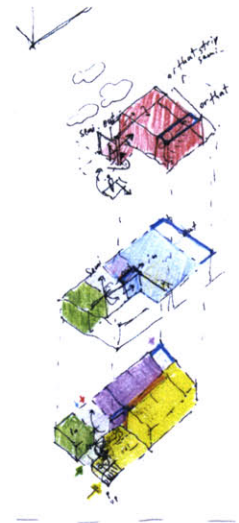
Blue apartment



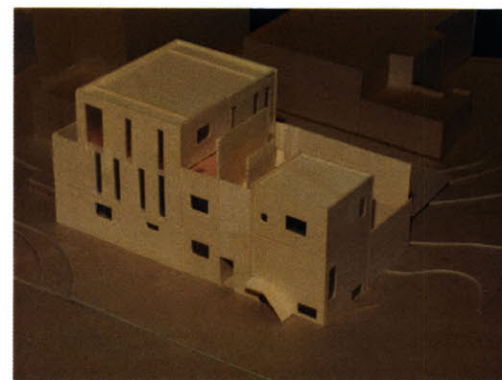
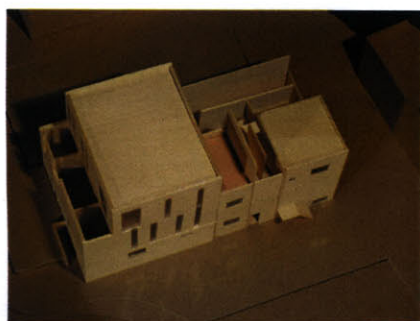
Green apartment

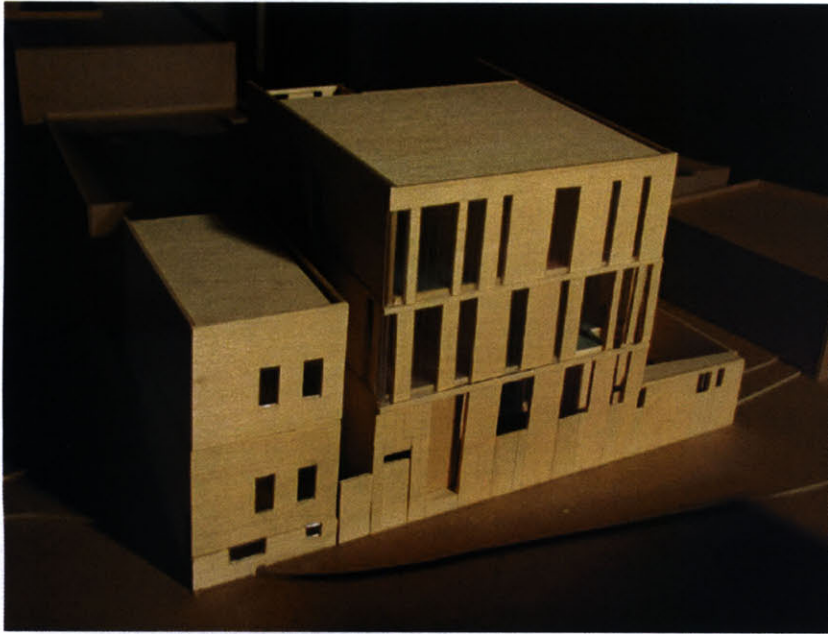


Stairway





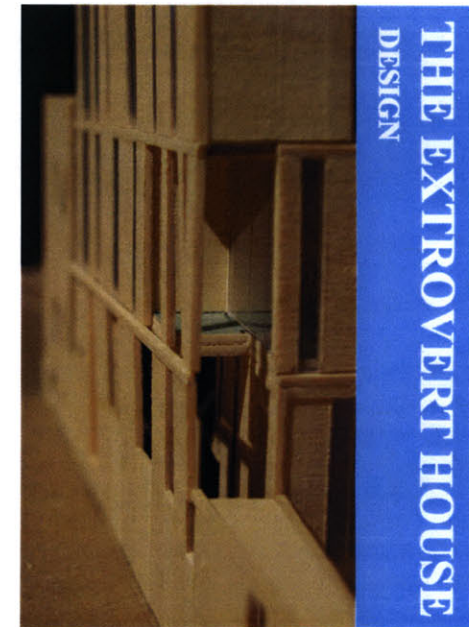




The Extrovert House is surrounded by the north and south courtyards and roof porches, to its east and west it is filtered from the street with a set of arcades. The front arcade in the ground floor is shared by several three apartment and continue as a private and free standing arcade to the south. A bench facing the street allows a glimpse into this deep perspective and intense plays of light and shadow.

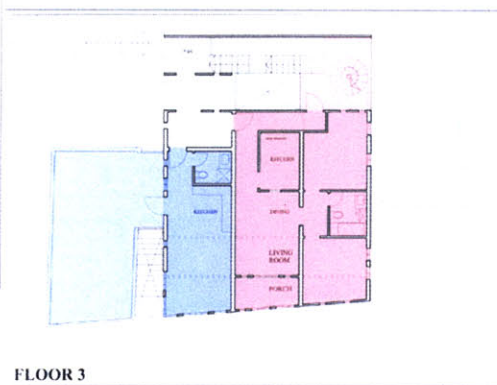
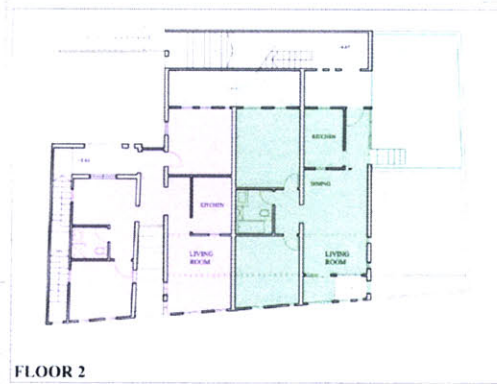
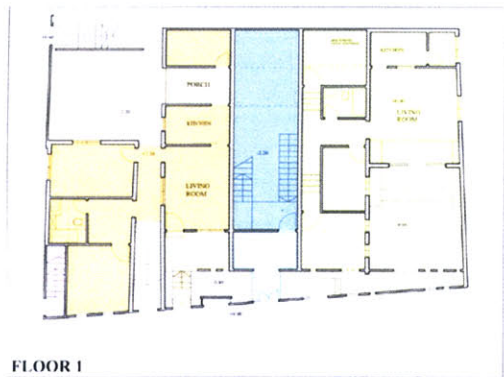
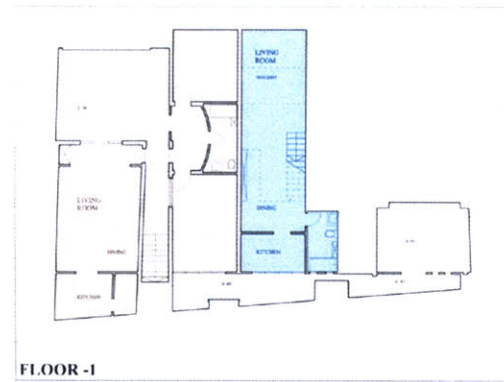
Each apartment is entered either through the back or front of the house, while the sequence of movement plays with the notion of the discovery of the other side or rediscovery of the same side from different height. The back and front arcade change their configuration and directions of opening as the paths to the apartments unfold.

Diagram showing the sequence of spaces from the street to the privacy of home to each unit (using a scale ranging from yellow to blue).



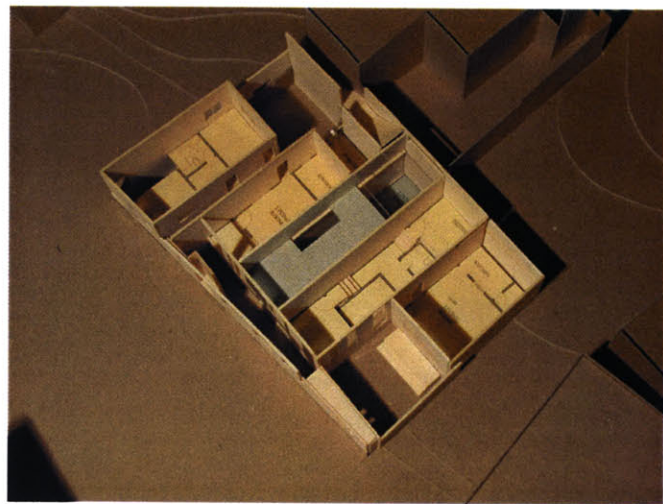
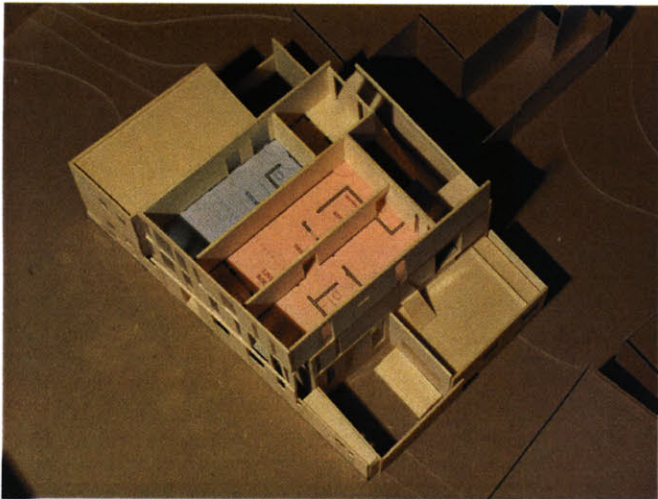
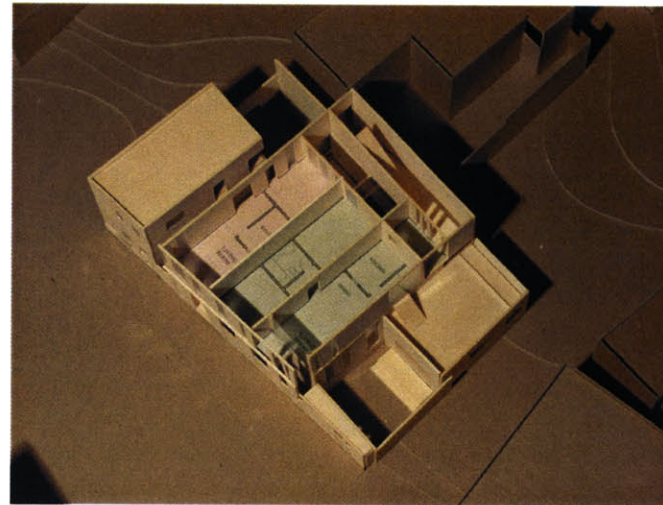
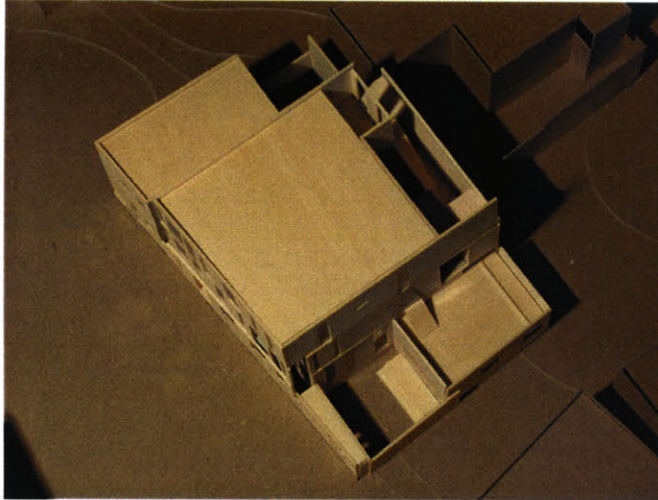


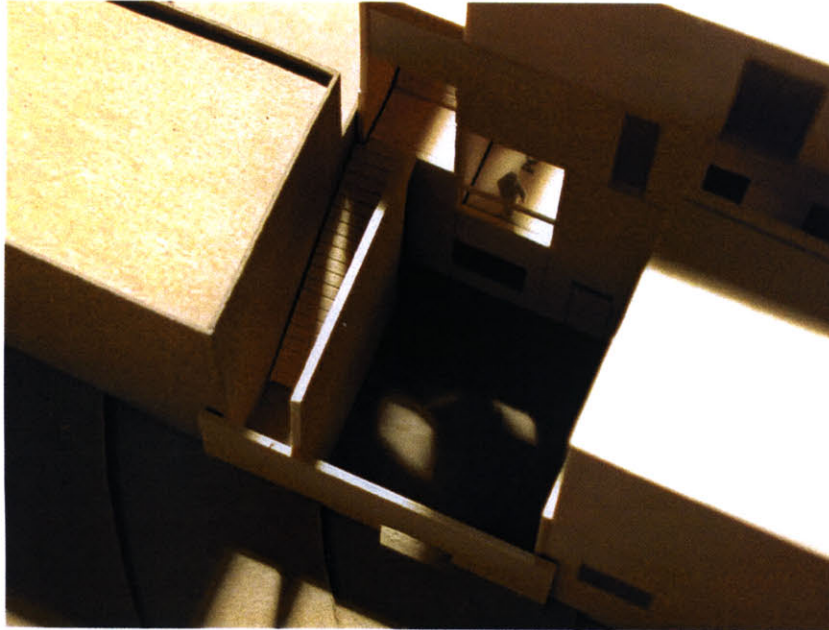
## PLANS 1:400CM



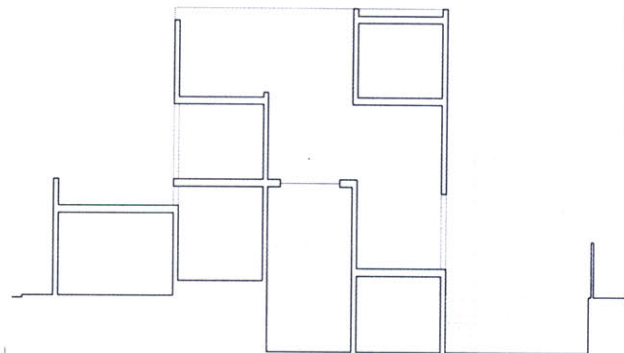
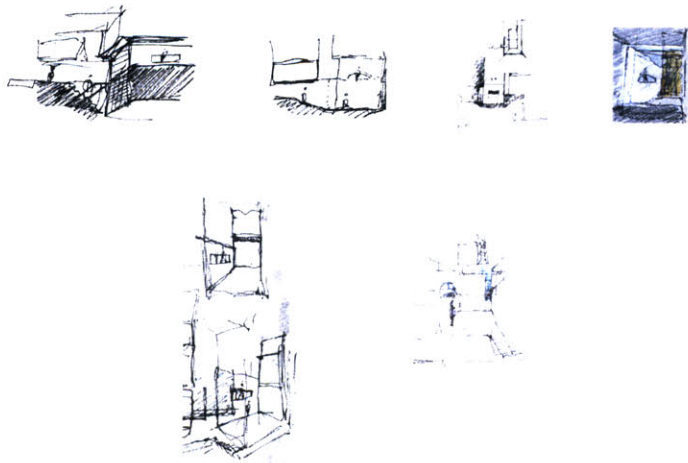
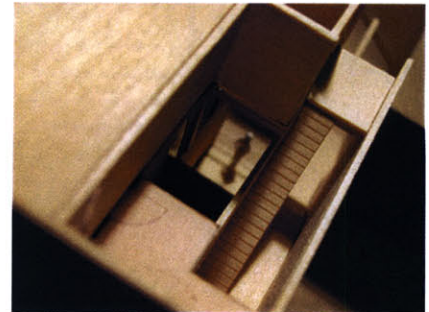
## PROCESS DRAWINGS







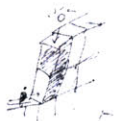
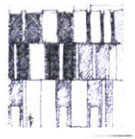
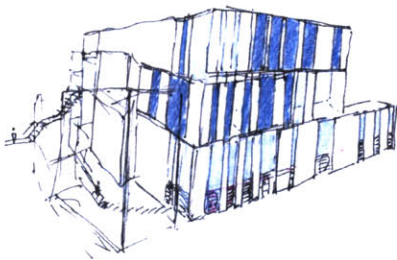
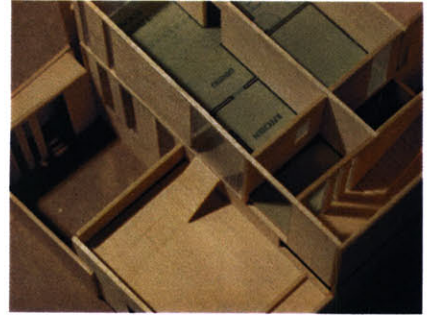
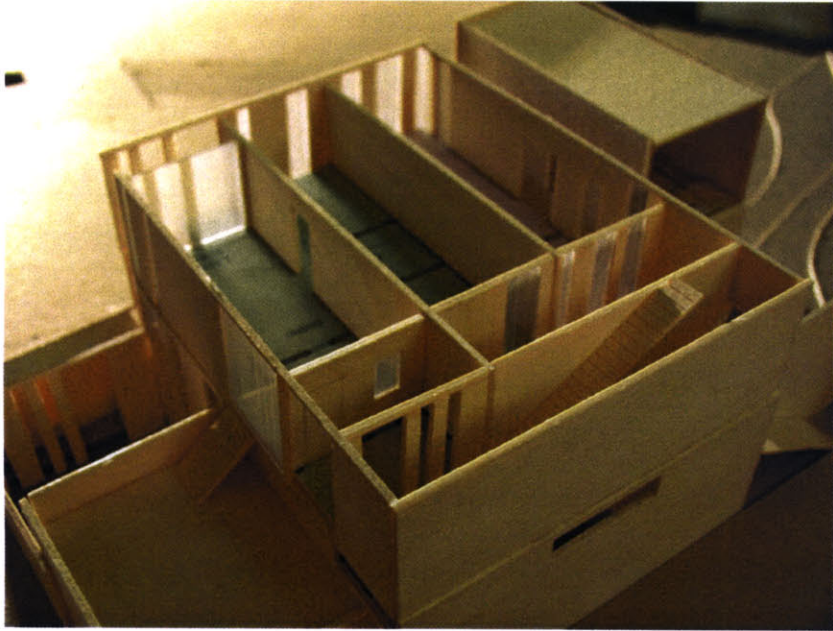
The northern courtyard is sunken 2.2m below ground, a window in the street level exposes an uncommon view of the street. Behind the eastern wall of the courtyard stairway leads into the upper floors of the house. A slanted light well is excavated into the building to allow light in many of the days of the years to filter into the dark courtyard.

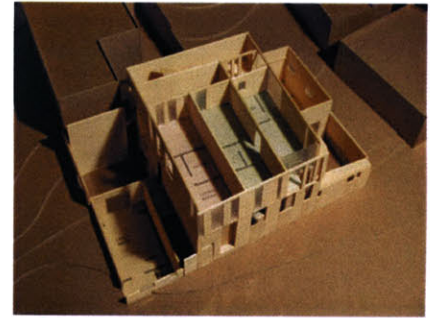
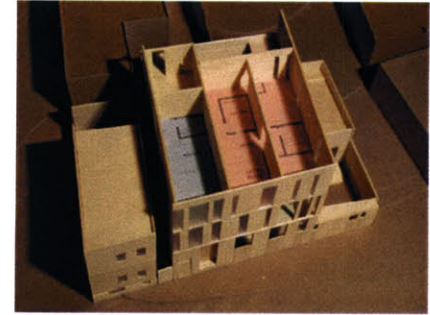


SECTION AA SCALE 1:100cm

Ochre apartment







Cullen, Gordon. *The Concise Townscape*, New York, Cincinnati, Toronto, London, Melbourne, Van Nostrand Reinhold Company, 1961.

Fux, Ron. "The Arab House in Ottoman Haifa- an Architectural Documentation", *Haifa: Historia Mekomit (Haifa: Local History)*, ed. Ben Arzi, Yosi. Haifa, Haifa University and Zmora Bitan, 1998.

Kedar. B. Z. *Mabat ve-od Mabat al Eretz Israel: Tatzlumey Avir mi-Yemey Milkhemet ha-Olam ha-Rishona mul Tatzlumim Bney Zmanenu (Looking Twice at the Land of Israel: Arial Views from World War I and Contemporary Photographs)*, Tel Aviv, Yad Itzhak Ben Zvi, Misrad ha-Bitahon – haHotsa'a la-Or, 1991.

Regev, Ofer. *Tiyul Katan be-Ir Gdola: Letayel be-Tel-Aviv-Yafo (A small Journey in a Big City: Touring in Tel-Aviv Jaffa)*, Tel-Aviv, Misrad ha-Bitahon – haHotsa'a la-Or; ha-Mo'atsah le-Shimur Mivnim ve-Atare Hityashvut; Hakhevra le-Haganat ha-Teva, 1999.

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Ushpiz, Arielah. *Ajami*, Tel Aviv, 1992.

Yanon, Ya'acov. *Sviv Kikar ha-Shaon (Around the Clock-Plaza)*. Jerusalem, Yad Izhak Ben-Zvi, 2001.

Zafir, Doron, Sergio Lerman et al. *Yafo: Mabat al Ajami, Dyokan Adrikhali (Jaffa: A Glance at Ajami; an Architectural Profile)*, Tel-Aviv, Municipality of Tel-Aviv-Jaffa, 1992.



**All images beyond those noted here are by the author**

**Fig. 1** Façade of 5 Rama Street, Nakhlaot, Jerusalem, Watercolor on paper, original scale 1:10, 1998, Noa Havilio.

**Fig. 2** Plan and Façade of 5 Rama Street, Nakhlaot, Jerusalem, Watercolor on paper, original scale 1:10, 1998, Noa Havilio.

**Fig. 3** Ajami in the Beginning of the 20<sup>th</sup> Century

Scholten, François. *La Palestine Illustrée : Tableau Complet De La Terre Sainte Par La Photographie, évoquant Les Souvenirs De La Bible, Du Talmud Et Du Coran, Et Se Rapportant Au Passé Comme Au Présent*. Paris,: J. Budry & co, 1929, p.60, 74.

**Fig. 4** Ajami in the Beginning of the 20<sup>th</sup> Century

Scholten, François. *La Palestine Illustrée : Tableau Complet De La Terre Sainte Par La Photographie, évoquant Les Souvenirs De La Bible, Du Talmud Et Du Coran, Et Se Rapportant Au Passé Comme Au Présent*. Paris,: J. Budry & co, 1929, p. 90, 41, 74, 67.

**Fig. 5** The Courtyard House, the Iwan House, the Riwaq House and the Central Space House

Fux, Ron. "The Arab House in Ottoman Haifa- an Architectural Documentation", *Haifa: Historia Mekomit (Haifa: Local History)*, ed. Ben Arzi, Yosi. Haifa, Haifa University and Zmora Bitan, 1998, p. 83, 85, 88, 90.

Zafir, Doron, Sergio Lerman et al. *Yafo: Mabat al Ajami, Dyokan Adrikhali (Jaffa: A Glance at Ajami; an Architectural Profile)*, Tel-Aviv, Municipality of Tel-Aviv-Jaffa, 1992, p.17.

**Fig. 6** Comparison of Aerial views of Ajami from the Years 1917, 1944 and Today

Kedar. B. Z. *Mabat ve-od Mabat al Eretz Israel: Tatzlumey Avir mi-Yemey Milkhemet ha-Olam ha-Rishona mul Tatzlumim Bney Zmanenu (Looking Twice at the Land of Israel: Aerial Views from World War I and Contemporary Photographs)*, Tel Aviv, Yad Itzhak Ben Zvi, Misrad ha-Bitahon – haHotsa'a la-Or, 1991.

Ushpiz, Arielah. *Ajami*, Tel Aviv, 1992.

**Fig. 7** Anchor Operation by the British Mandate Army in Retaliation for the “Arab Rebellion”: Aerial Photos Taken in June 16, 1936, and the Plan Made by the British Advisor for Urban-Planning.

Yanon, Ya‘acov. *Sviv Kikar ha-Shaon (Around the Clock-Plaza)*. Jerusalem, Yad Izhak Ben-Zvi, 2001, p.82-83.

**Fig. 8** Ajami Houses Dipping in the Mediterranean Sea in the Beginning of the 20<sup>th</sup> Century.

Kedar. B. Z. *Mabat ve-od Mabat al Eretz Israel: Tatzlumey Avir mi-Yemey Milkhemet ha-Olam ha-Rishona mul Tatzlumim Bney Zmanenu (Looking Twice at the Land of Israel: Aerial Views from World War I and Contemporary Photographs)*, Tel Aviv, Yad Itzhak Ben Zvi, Misrad ha-Bitahon – haHotsa’a la-Or, 1991, p.88.

**Fig. 9** Construction Waste Blocking the Sea and Demolished and Neglected Houses

First image: Ushpiz, Arielah. *Ajami*, Tel Aviv, 1992, p.21

Rest of the Images taken in the summer, Noa Havilio.

**Fig. 10-11** Houses in Ajami

Photography and digital imaging: Noa Havilio, Ajami, summer 02.

**Fig. 12** Map Showing the Location of the Four Houses.

Map retrieved from the Municipality of Tel-Aviv-Jaffa

**Fig. 13** Sketches Figuring the Sequences of In-between Spaces, Noa Havilio

**Fig. 14** In-between Spaces in 21 Ben-Adaya, 13 Reuveni, 19 Dolphin, 20 Kabarnit

Photography and digital imaging: Noa Havilio, Ajami, summer 02.

**Fig. 15** 21 Ben-Adaya – General view, photo: Noa Havilio

**Fig. 16** 21 Ben-Adaya – Photomontages of Staircase Space

Photography and digital imaging: Noa Havilio, Ajami, summer 02.

**Fig. 17** 19 Dolphin – General View from Southwest.

Noa Havalio, Pastel on Brown Paper, 02.

**Fig. 18** 19 Dolphin – Images of the Two Apartments

**Fig. 19** 19 Dolphin – To the Left: Diagram Showing Division to Units.

To the Right: Diagram Showing Sequence of In-between Spaces. Scale 1:500cm

The plans were drawn on the basis of measurements taken on site juxtaposed with plans found in the archive of the Municipality of Tel-Aviv- Jaffa.

**Fig. 20** 20 Kabarnit - General View from the Northeast.

**Fig. 21** 20 Kabarnit - Images of Three Gates and Two Apartments

**Fig. 22** Kabarnit 20 - To the Left: Diagram Showing Division to Units.

To the Right: Diagram Showing Sequence of In-between Spaces. Scale 1:500cm

The plans were drawn on the basis of measurements taken on site juxtaposed with plans found in the archive of the Municipality of Tel-Aviv- Jaffa.

**Fig. 23** Axonometric Diagram of the Layers of spaces in 20 Kabarnit

Noa Havalio, Brown ink, 02.

**Fig. 24** Sequences of Movement in 20 Kabarnit Street

Noa Havalio, Black ink, 02.